

Date: Mon, 16 May 94 04:30:17 PDT
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
Precedence: Bulk
Subject: Ham-Space Digest V94 #125
To: Ham-Space

Ham-Space Digest Mon, 16 May 94 Volume 94 : Issue 125

Today's Topics:

 435 MHZ down converters?
 ANS-133 BULLETINS
 bbs
 Guide to the Personal Radio Newsgroups
 Please Help Me

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 13 May 94 13:26:38 GMT
From: agate!darkstar.UCSC.EDU!news.hal.COM!olivea!charnel.ecst.csuchico.edu!nic-
nac.CSU.net!usc!howland.reston.ans.net!EU.net!sunic!psinntp!psinntp!arrrl.org!
zlau@ucbvax.berkeley.edu
Subject: 435 MHZ down converters?
To: ham-space@ucsd.edu

Joe Mack NA3T (mack@ncifcrf.gov) wrote:
: In article <2qrk5q\$2tb@search01.news.aol.com>
: Gary wa4ymz@aol.com (Wa4ymz) writes:

: >I have a mast-mount pre-amp at 70cM,
: >but would like to mount the converter at the
: antenna to minimize coax signal
: >loss. Is this a big concern if I use the pre-amp?

: Not at all. If you have a 20db gain preamp,
: then you can afford to have maybe

: 15db of loss in the coax before you get into trouble.
:You can use RG-58 on the
: way down :-). I have the converter next to the HF receiver.

The best case, using a 0 dB NF preamp and a 0 dB NF converter,
results in a system NF of 1.16 dB due to the coax loss.

The usual rule of thumb is 10 dB more gain than noise figure
(noise figure of converter + coax loss). However, if you
are using a 435 yagi and a 0.4 dB NF preamp, you might need
a ratio closer to 20 dB to take advantage of the low noise
figure of the preamp. On 2 meters, the band is often too noisy
to really take advantage of < 1 dB receiver noise figures.

Back when the rule was formulated, I think anyone who had
a 0.4 dB NF preamp with plenty of gain could have told
you off the top of his head how to calculate system
noise figures.

There is also the receiver overload problem to consider--too
much preamp gain can overload the receiver in areas with
interference. Thus, it may not be practical to have a very
sensitive receiver on some bands.

--

Zack Lau KH6CP/1 2 way QRP WAS
 8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

Date: Sun, 15 May 1994 16:48:31 MDT
From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!
ve6mgs!usenet@network.ucsd.edu
Subject: ANS-133 BULLETINS
To: ham-space@ucsd.edu

SB SAT @ AMSAT \$ANS-133.01
AMSAT-NA SYMPOSIUM REMINDER

HR AMSAT NEWS SERVICE BULLETIN 133.01 FROM AMSAT HQ
SILVER SPRING, MD MAY 14, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-133.01

10th Annual AMSAT-NA Symposium Information

The 10th AMSAT-NA Space Symposium and Annual Board-of-Directors Meeting
will be held this year in Orlando, FL on October 7,8, and 9th. The

location of the Symposium will be the Holiday Inn near the Orlando International Airport. For further information about the Symposium, please contact Martha Saragovitz at AMSAT-NA Headquarters at (301) 589-6062. Start your planning now so that you can be ready to attend this year's AMSAT-NA Space Symposium.

[The AMSAT News Service (ANS) would like to thank Martha Saragovitz for this bulletin item.]

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SB SAT @ AMSAT \$ANS-133.02
UNAMSAT-1 LAUNCH DATE SET

HR AMSAT NEWS SERVICE BULLETIN 133.02 FROM AMSAT HQ
SILVER SPRING, MD MAY 14, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-133.02

XE1TU Announces That Launch Date For UNAMSAT-1 Is Set

David Liberman (XE1TU) has spent the past five weeks in bed trying to get rid of a bad case of hepatitis. But he reports that he is well again and back in the lab preparing to begin the launch campaign of UNAMSAT-1 MICROSAT. The launch date has been set for the 15-JUNE-94, but there is a possibility that it might get delayed about one week. XE1TU and his UNAMSAT-1 team is preparing to leave Mexico City soon to fly to Moscow where UNAMSAT-1 will be put into a thermal vacuum chamber and tested before it is attached to the launch vehicle.

XE1TU would like to thank all those who sent him "get-well" messages and cards and he promises to answer all of them. XE1TU notes that when he returned to work last week, he had over 530 messages waiting for him on e-mail!

Watch for progress reports about the launch campaign of UNAMASAT-1 in the AMSAT News Service (ANS) bulletins.

[The AMSAT News Service (ANS) would like to thank David Liberman (XE1TU) for this bulletin item.]

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SB SAT @ AMSAT \$ANS-133.03
AO-13 OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 133.03 FROM AMSAT HQ
SILVER SPRING, MD MAY 14, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-133.03

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date	UTC	Mode	Phs	NCS	Alt NCS
21-May-94	2130	B	185	VE2LVC	W9ODI

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

"Slow Scanners" are invited to join the SSTV sessions on AO-13. The frequency is 145.955 MHz. The net meets at 45 minutes before Mode S, and on Mode B following Mode S on Saturdays and Sundays. Join those sessions or convey your wishes for other SSTV skeds to wb6llo@amsat.org, and he will coordinate your efforts.

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SB SAT @ AMSAT \$ANS-133.04
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 133.04 FROM AMSAT HQ
SILVER SPRING, MD MAY 14, 1994
TO ALL RADIO AMATEURS BT
BID: \$ANS-133.04

Weekly OSCAR Status Reports: 14-MAY-94

AO-13: Current Transponder Operating Schedule:

L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 May 07-Jul 11
Mode-B : MA 0 to MA 170 |
Mode-BS : MA 170 to MA 218 |
Mode-S : MA 218 to MA 220 |<- S beacon only
Mode-S : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 250 | Alon/Alat 230/-5
Mode-B : MA 250 to MA 256 |
Omnis : MA 250 to MA 120 | Move to attitude 180/0, Jul 11
[G3RUH/DB20S/VK5AGR]

FO-20: The FO-20 ground command station has confirmed that the bird has been malfunctioning. The operational schedule announced previously is

currently suspended and the analog mode will be continued indefinitely.
Further operation schedule will be announced on and after 11-May-94.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

K0-25: K0-25 is operating normally. Please remember that the uplink frequency has been changed due to trouble with the other receiver. The current uplink now is 145.870 MHz. [WH6I]

A0-16: Working well. [WH6I]

L0-19: Operating normally. [WH6I]

K0-23: Operating Normally. [WH6I]

I0-26: Operating normally. [WH6I]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

Date: 11 May 94 03:14:11 GMT
From: agate!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!
csn!springsboard!pat.curtis@ucbvax.berkeley.edu
Subject: bbs
To: ham-space@ucsd.edu

hey pat, welcome to the
springboard- have fun

Date: Sun, 15 May 1994 13:45:32 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!howland.reston.ans.net!wupost!crcnis1.unl.edu!
news.unomaha.edu!news@network.ucsd.edu
Subject: Guide to the Personal Radio Newsgroups
To: ham-space@ucsd.edu

Posted-By: auto-faq 3.2.1.2

Archive-name: radio/personal-intro

Revision: 1.5 12/18/93 14:15:53

Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to the author, Jay Maynard, K5ZC, by Internet electronic mail at jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September 1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to note the rmgroup of rec.radio.amateur.packet, and to officially retire some (in)famous threads of discussion on rec.radio.amateur.policy.

History

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Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began to dominate other topics in the group and on the list. This resulted in the logical solution: a group was created to hold the packet discussion, and another corresponding mailing list was created as well: net.ham-radio.packet and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great Renaming essentially unchanged, moving from net.ham-radio[.packet] to rec.ham-radio[.packet]. Readership and volume grew with the rest of the network.

The INFO-HAMS mailing list was originally run from a US Army computer at White Sands Missile Range, SIMTEL20. There were few problems with this arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those

folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluff, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups =====

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize

this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, `rec.radio.amateur.packet`, should be removed by September 21st, 1993. It is obsolete, and you should use `.digital.misc` instead (or the appropriate new mailing list, mentioned below). The group has `.misc` as part of the name to allow further specialization if the users wish it, such as `.digital.tcp-ip`.

The swap group is now `rec.radio.swap`. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially `.equipment` and `.homebrew`, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in `rec.radio.swap`; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is `rec.radio.amateur.policy`. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is `rec.radio.cb`. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in `rec.ham-radio` in the past; please do not cross-post to both `rec.radio.cb` and `rec.radio.amateur.*` unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The `rec.radio.info` group is just what its name implies: it's the place where informational messages from across `rec.radio.*` may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar propagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is `rec-radio-info@ve6mgs.ampr.ab.ca`. Inquires and other administrivia should be directed to `rec-radio-request@ve6mgs.ampr.ab.ca`. For more information about `rec.radio.info`, consult the introduction and posting guidelines that are

regularly posted to that newsgroup.

The groups `rec.radio.amateur.antenna`, `.equipment`, `.homebrew`, and `.space` are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The `.equipment` group is not the place for buying or selling equipment; that's what `rec.radio.swap` is for. Similarly, the `.space` group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's `rec.crafts.brewing`), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for `rec.radio.swap` and `rec.radio.cb`, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to `listserv@ucsd.edu` for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the `'.'`'s with `'-'`'s - for example, `rec.radio.swap` becomes `rec-radio-swap` - and send to that name@cs.utexas.edu (`rec-radio-swap@cs.utexas.edu`, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting

=====

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the `rec.radio.info` newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the `rec.radio.info` moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made

arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--

Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.

"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Date: Fri, 13 May 94 20:09:00 -0600
From: newsflash.concordia.ca!canopus.cc.umanitoba.ca!mona.muug.mb.ca!calvin!
techtol.muug.mb.ca!uugate@uunet.uu.net
Subject: Please Help Me
To: ham-space@ucsd.edu

TO: All

From: pst@techtol.muug.mb.ca
->* In a message to All <09 May 94 14:16> Michael Malloy wrote:*

MM> From: mmjjmm@post.its.mcw.edu (Michael Malloy)

MM> I am interested in getting started in
MM> satellite communications and would
MM> like to get more information. If you
MM> have any files or information that
MM> you could forward I would be grateful.
MM> 73 Mike N9WJV

Hi Mike, Just for starters ... what type of equipment do you have on hand right now?

Bye for now. Paul J.

... -*->E-Mail by Internet to -> pst@techtol.muug.mb.ca (Paul Strelioff)
___ CRR QWK 1.60+

Date: 11 May 94 16:16:01 GMT
From: agate!spool.mu.edu!torn!nott!cunews!freenet.carleton.ca!FreeNet.Carleton.CA!

ag381@ucbvax.berkeley.edu
To: ham-space@ucsd.edu

References <peter.henne-090594122346@129.26.163.253>,
<CpEqH7.EuC@freenet.carleton.ca>, <CpJ3JC.2x1@bbc.co.uk>CA
Reply-To : ag381@FreeNet.Carleton.CA (Herb Dieben)
Subject : Re:Re: Re APT Wheather

In a previous article, peter.henne@gmd.de (Peter Henne) says:

```
>In article <CpJ3JC.2x1@bbc.co.uk>, boyer@rd.eng.bbc.co.uk (John Boyer)
>wrote:
>
>> Herb Dieben (ag381@FreeNet.Carleton.CA) wrote:
>>
>>
>> : What would be the 'best case' resolution of NOAA's either or VIS / IR
>> : or both. Another way of asking is what number of pixels do their sensors
>> : use? Also while we are at it, what is 'best case' gray scale resolution?
>> : Let me know if you can. Or perhaps direct me to a reliable source for
>> : this info.
>> : Thank you, reader!
>>
>>
>> Best case horizontal resolution is 4800 pixels per line. The grey scale
>> resolution depends on your converter.
>>
>>
>> john b
>> john.boyer@rd.eng.bbc.co.uk
>
>Oh, I am in doubt....if you talk about APT.
>Subcarrier is 2400 Hz, AM-modulated max 1600 Hz, 2 Lines/sec
>containing a vis-Line and a Th.IR-line. So we can rely on just
>not very much more than 400 dots per line. This gives a pixel-
>resolution of 7.2 km x 3.6 km (scan-dir x orbit-direction).
>Resolution of greyscale is not better than 1:200 (if you reach that,
>normally your converter will achieve 1:64 or so): APT is an
>analog format.
>HRPT-Resolution is 2048 Pix/lin, 10 Bit depth per channel, a frame
>has 5 channels, 6 frames per second. Resolution is just below 1x1 km.
>10 Bit depth: HRPT is a digital format, you will see the full
>resolution or nothing.
>
>Regards
>Peter
```

>

Thanks Peter,that was really helpful.

Could you shine some light on the subject of aspect ratio??

Right now I have some 600 pixels on the x_axis(hor) and some 480 on the y_axis,similar to VGA.This gives me rather distorted images from NOAA 9 in that North to South is about 50 % stretched relative to East to West.Is this simply perspective??

>

End of Ham-Space Digest V94 #125
